

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION AND INSTALLATION OF A NEW CONTROLLER AND VEHICULAR SIGNALS AT THE INTERSECTION OF MD 450 AT BOWIE VOL. FIREHOUSE IN PRINCE GEORGE'S COUNTY. MD 450 IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION.

INTERSECTION OPERATION

NORMAL OPERATION  
THE INTERSECTION WILL OPERATE IN A NEMA-SINGLE-PHASE, FULLY ACTUATED MODE. THE MOVEMENTS ON MD 450 WILL OPERATE CONCURRENTLY. THE MOVEMENTS AT THE FIREHOUSE WILL OPERATE CONCURRENTLY. THE INTERSECTION WILL INTERCONNECT WITH THE NEW CONTROLLER AT THE INTERSECTION OF MD 450 AND MILLSTREAM/STONYBROOK DRIVE AND AT THE EXISTING CONTROLLER AT THE INTERSECTION AT MD 450 AT SUPERIOR LANE.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, SOLID STATE EIGHT PHASE CONTROLLER WITH SYSTEM PACKAGE, TELEMETRY MODULE, ISOLATION BOARD AND SPECIAL RELAY HOUSED IN NEMA SIZE "6" BASE MOUNTED CABINET.

SPECIAL NOTE

ALL UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE BECAUSE THESE UTILITIES MAY BE MODIFIED PRIOR TO AND DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER IMMEDIATELY.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

CAT CODE NUMBER	SPEC. SECTION	QUANTITY	DESCRIPTION
971017	816	1 EA.	EIGHT PHASE, FULL TRAFFIC ACTUATED SOLID STATE DIGITAL CONTROLLER WITH SYSTEM PACKAGE, HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
973023	813	36 S.F.	SHEET ALUMINUM SIGN TO CONSIST OF: -2 EA. W11-8 (36 IN. X 72 IN.)-MAST ARM MOUNT

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

CAT CODE NUMBER	SPEC. SECTION	QUANTITY	DESCRIPTION
203030	205	2 C.Y.	TEST PIT EXCAVATION
585624	556	50 L.F.	24 IN. HEAT APPLIED THERMOPLASTIC WHITE PAVEMENT MARKING
801004	801	6 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
802501	805	30 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
810010	810	45 L.F.	ELECTRICAL CABLE 1-CONDUCTOR (NO. 4 AWG)
811001	811	5 EA.	ELECTRICAL HANDHOLE
813015	813	36 S.F.	INSTALL OVERHEAD SIGN
818050	818	1 EA.	27 FT. STEEL POLE WITH TWIN 50/60 FT. MAST ARMS
837001	804	2 EA.	GROUND ROD 3/4 IN. X 10 FT. LENGTH
838003	807	1 EA.	CONTROL AND DISTRIBUTION EQUIPMENT (120/240V 1 PHASE, 3 WIRE SYSTEM)
860270	814	6 EA.	8 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860272	814	12 EA.	12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
861107	810	215 L.F.	ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 AWG)
861108	810	710 L.F.	ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 AWG)
870163	805	13 L.F.	3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-TRENCHED
870166	805	188 L.F.	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-TRENCHED
870168	805	107 L.F.	4 IN. SCHEDULE 80 RIGID PVC ELCTRICAL CONDUIT-SLOTTED
871117	816	1 EA.	INSTALL CONTROLLER AND CABINET-BASE MOUNT
800000	XXX	1 L.S.	REMOVE AND DISPOSE OF EXISTING MATERIAL

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

~~CHARLIE WATKINS~~  
DISTRICT ENGINEER  
PHONE: 301-513-7300

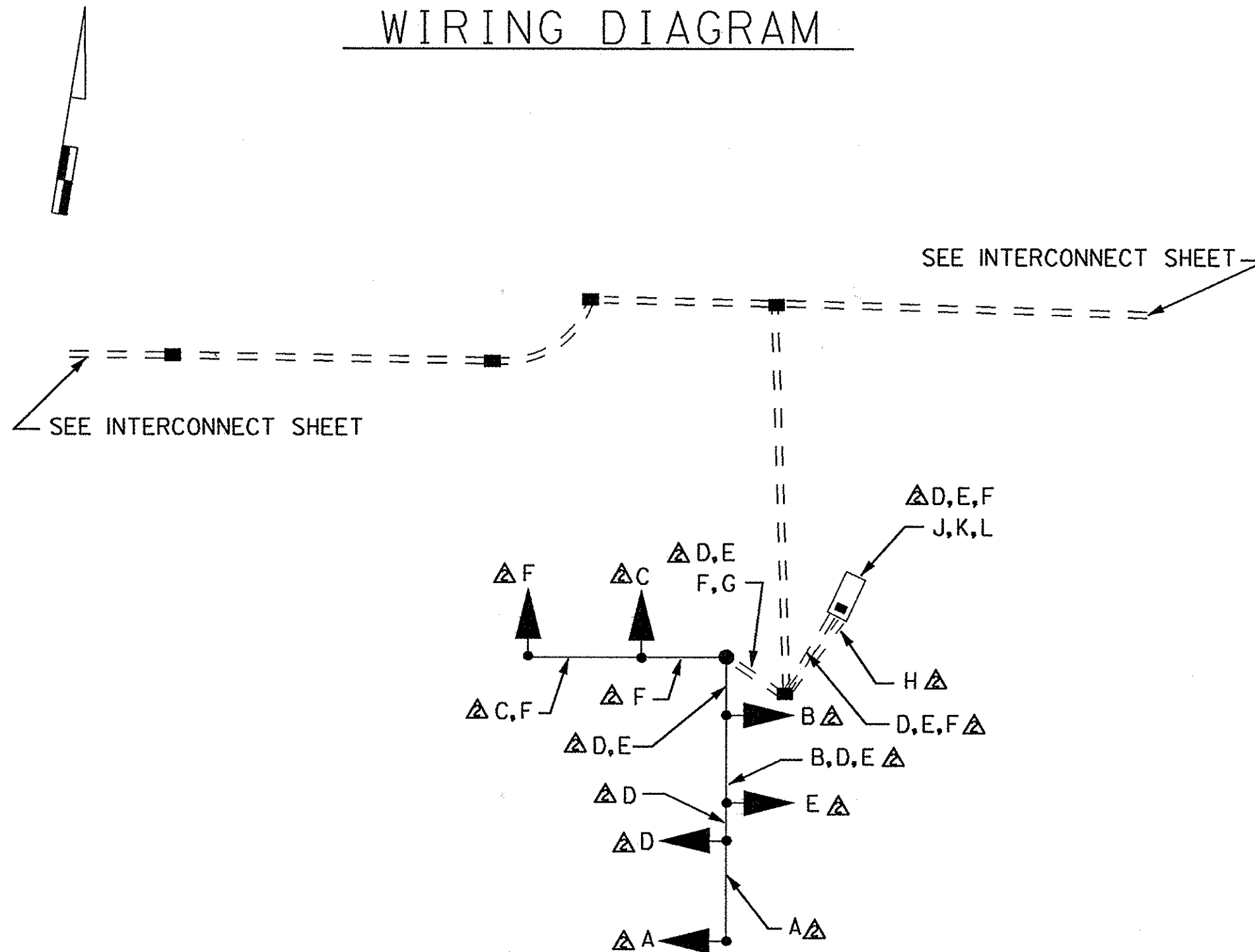
MAJID SHAKIB  
ASSISTANT DISTRICT ENGINEER-TRAFFIC  
PHONE: 301-513-7358

ROBERT SNYDER ASSISTANT DIVISION CHIEF  
TRAFFIC OPERATION DIVISION  
PHONE: 410-787-7630

AUGIE REBISH  
ASSISTANT DISTRICT ENGINEER-UTILITIES  
PHONE: 301-513-7350

RALEIGH MEDLEY  
ASSISTANT DISTRICT ENGINEER-MAINTENANCE  
PHONE: 301-513-7304

WIRING DIAGRAM



PHASE CHART

	1	2	3	4	5	6	
	(R)	(R)	(R)	(R)	(R)	(R)	
	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	
	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	
PHASE 2+6	G	G	G	G	R	R	←
2+6 CHANGE	Y	Y	Y	Y	R	R	→
FLASHING	FL	FL	FL	FL	FL	FL	↔
OPERATION	Y	Y	Y	Y	Y	R	↔

EQUIPMENT LIST "C"

C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CABINET. CABINET AND ALL OTHER MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

REDLINE NO. 1 5/6/02

ADDENDUM #2 10/11/2001



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION SHEET  
MD 450 - MD 193 TO STONYBROOK DRIVE  
MD 450 AT BOWIE VOL. FIREHOUSE - ULTIMATE

THE WILSON T. BALLARD CO.  
CONSULTING ENGINEERS  
OWINGS MILLS, MARYLAND

DRAWN BY: MB	F.A.P. NO. SEE TITLE SHEET	TS NO. TS-119B-G1	SHEET NO.
CHECKED BY: STB	S.H.A. NO. PG9005571	T.I.M.S. NO. D 538	446 OF 545
SCALE: NONE	COUNTY: PRINCE GEORGE'S		
DATE: OCTOBER 2001	LOG MILE:		